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Adsorption of Helical Polymers on a Substrate MATTHEW WILLIAMS, Univ of Georgia — Formation of tertiary structures made up of helical polymer segments is modified by the introduction of a substrate on which the polymer is adsorbed. The effect of a substrate on biological systems such as helical structures may be important in the formation of early life. We perform replicate exchange Monte Carlo simulations to study the effect of a substrate on formation of helical structures, comparing the structural phase space for both adsorbed and non-adsorbed helical polymers. For this purpose a generic, hybrid coarse-grained model for polymer adsorption has been employed.

Matthew Williams Univ of Georgia

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